

Prof 71 08017

NPIC/TSSG/D-1083-68
16 February 1968

MEMORANDUM FOR: Chairman, Systems & Programming Working Group
THROUGH : Chief, Technical Services and Support Group
SUBJECT : Requested Evaluation of [REDACTED] IIS Program
REFERENCE : 30 January 1968, RYN III, memo on same subject

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1. In answer to the specific questions raised in Paragraph 2 of the reference memo, the following information is offered.

a. Availability - There is no known source of supply for the equipments exactly as they are described in the IIS hardware specifications. However, by minor modifications of the specifications, i.e., reducing the teletype print speed, utilizing CRT devices with smaller character capacity, deleting the upper/lower case requirements from some of the consoles, etc.; it is possible to move the equipment into the "off-the-shelf" category. The major spec requirement to overcome is the necessity of meeting the requirements of FED-STD-222, Radiation standards. There has been no apparent difficulty so far in satisfying the Agency's radiation requirements with the equipment now on board, so perhaps there will be no problem here. This still must be determined, however. DPD is currently thinking along the lines of modifying their requirements to permit the utilization of standard equipment. This, of course, would call for no R&D and thus possibly would affect the programming effort mentioned in Paragraph 1 of the reference memo.

b. Price - Supposedly the prices indicated by [REDACTED] in their Phase II report are within the bounds of reason. However, before a definitive equipment cost statement could be made, it would be necessary to solicit prices based on the NPIC specifications from the various equipment manufacturers. Once again the current DPD thinking

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is toward the utilization of off-the-shelf equipment and thus would not appear as R&D budgetary items. The utilization of standard hardware opens up another implementation option by permitting a possible leasing arrangement to be made, thus avoiding the otherwise large hardware acquisition costs.

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c. Adequacy of specifications - The specifications per se appear to be complete and comprehensive. One of the requirements levied on [REDACTED] was that specifications furnished in the Phase II report should be suitable for attachment to RFP's without extensive re-write or modification. It is believed that this requirement has been met. Computer hardware people within DPD are currently reviewing the specification to insure that the requirements levied in the specifications reflect DPD's actual needs.

d. Anticipated reliability of proposed equipment - The reliability requirement levied in the equipment specifications is expressed in terms of calculated mean time between failure. MTBF of 1000 hours is required for the Double Font Editing consoles, the Query Consoles, the Telegraph Send/Receive unit with Tape Punch and Reader, and the Data Entry console. MTBF of 500 hours is required for the Telegraph Send/Receive units, and the Telegraph Receiver units.

e. Versatility or compatability of equipment interface with other requirements - One of the basic requirements in the design of the IIS was the flexibility to accommodate changes due to new Exploitation techniques, new collection systems, product changes, and data base expansion or revision. Target recognition and change detection systems will undoubtedly require quantitative target measures to be incorporated into the IIS data base; the IIS query capabilities will provide access to various indices and other data base references which will facilitate film handling; and rapid preparation for read out will be assisted by the IIS automated procedures. In short, the proposed structure of the data base and its modular storage characteristics should provide the adaptability required to permit ready change, expansion, and revision.

f. Correlation with Auto-Reporting Techniques Study findings - Inasmuch as the auto-reporting techniques study is incomplete, a positive statement as to the correlation between the findings of the

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study and the IIS would be premature. Efforts have been made both by [REDACTED] to insure that possible duplication is minimized. No additional plotting equipment is anticipated for use in the IIS so that the Graphic composition equipment, such as that produced by [REDACTED] and investigated by [REDACTED] and his study group, would not be in conflict. The IIS should assist in the generation of information for use in many of NPIC's reports but no computerized printing equipment is currently scheduled under the IIS, other than some hard copy read-out devices. Of course the modular storage characteristics mentioned above would also permit the expansion of the data base to handle a fully computerized automatic reporting system if such is deemed desirable.

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2. It might prove advantageous if members of the Systems and Programming Staff would read the entire Phase II final report as an aid to understanding the proposed system. [REDACTED] of the SPS has already borrowed Volume I, Part I, System Operation and Evaluation for review. The other volumes of the report are also available for perusal. STATINTL

3. If additional information is desired, please feel free to contact the undersigned.

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[REDACTED]
Acting Chief, Research & Development Branch, TSSG

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